



Course Specification

— (Postgraduate)

| |
|--|
| Course Title: Research Project II |
| Course Code: BIOD598 |
| Program: Master's in Biodiversity |
| Department: Department of Biology |
| College: Faculty of Science |
| Institution: University of Tabuk |
| Version: 2 |
| Last Revision Date: 18/11/1444 H |



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A. General information about the course:

1. Course Identification:

1. Credit hours: 3 Credit Hours

2. Course type

A. University College Department Track

B. Required Elective

3. Level/year at which this course is offered: (Level 4/ Second year)

4. Course General Description:

The student will learn how to design research, collect literature and data, interpretation of research findings, write research, preparation of the dissertation, and present research on different topics of biodiversity. They will be skilled in independent thinking skills, sample and data collection, and field training based on the modern techniques of biodiversity assessment and conservation.

The main steps for the completion of the research project are:

1. **Weekly meetings with the supervisor:** The student and her/his supervisor should schedule a meeting time, preferably once per week.
2. **Data Collection:** During the first and second semesters of the second year of the study, students should conduct a field and/or a lab to collect, analyze, and interpret their results.
3. **Writing up the Research Dissertation:** By the end of the academic year, each student has to submit three copies to the course coordinator by the required date before the final defense.
4. **Project Presentation and defense:** By the required date students should present her/his work as part of a seminar, present themselves for the defense in front of a committee, and be able to answer questions asked by the committee members.

5. Pre-requirements for this course (if any):

- **Research Project I (BIOD525).**

6. Pre-requirements for this course (if any):

- **None.**

7. Course Main Objective(s):

- To develop an appropriate level of knowledge, and skills in documentation, analyses, presentation, and interpretation of results, and writing scientific reports.
- To provide students with the needed skills to conduct a guided, independent research study on a specific topic in the field of biodiversity.
- To train students through research and problem-solving skills, literature searching, and presentation skills in the current field of biodiversity.

2. Teaching Mode: (mark all that apply)



| No | Mode of Instruction | Contact Hours | Percentage |
|----|--|---------------|------------|
| 1 | Traditional classroom | 90 | 100% |
| 2 | E-learning | | |
| 3 | Hybrid <ul style="list-style-type: none"> Traditional classroom E-learning | | |
| 4 | Distance learning | | |

3. Contact Hours: (based on the academic semester)

| No | Activity | Contact Hours |
|-------|--|---------------|
| 1. | Lectures | |
| 2. | Laboratory/Studio | |
| 3. | Field | |
| 4. | Tutorial | |
| 5. | Others (specify)..... Supervisor meeting (Follow-up/monitoring) + Coursework (Laboratory and/or field work + writing up the dissertation, etc..) | 90 |
| Total | | 90 |

B. Course Learning Outcomes (CLOs), Teaching Strategies and Assessment Methods:

| Code | Course Learning Outcomes | Code of CLOs aligned with program | Teaching Strategies | Assessment Methods |
|------|--|-----------------------------------|--|--|
| 1.0 | Knowledge and understanding | | | |
| 1.1 | Recognize the recent, advancements and currently active research areas in biodiversity. | K2 | <ul style="list-style-type: none"> Coursework. Seminars. Ethical research practices sessions. | <ul style="list-style-type: none"> Evaluation of the Coursework. Defense. |
| ... | | | | |
| 2.0 | Skills | | | |
| 2.1 | Apply advanced concepts, theories, and methods to carry out scientific research in a specified area of biodiversity. | S1 | <ul style="list-style-type: none"> Coursework. Seminars. Regular feedback sessions. Presentations. | <ul style="list-style-type: none"> Coursework. Defense. Evaluation of the dissertation. |
| 2.2 | Analyze the research | | <ul style="list-style-type: none"> Coursework. | <ul style="list-style-type: none"> Coursework. |



| Code | Course Learning Outcomes | Code of CLOs aligned with program | Teaching Strategies | Assessment Methods |
|------------|--|-----------------------------------|--|--|
| | problem and its results using modern tools and methods to the problem in the field of biodiversity. | S2 | <ul style="list-style-type: none"> - Seminars. - Regular feedback sessions. - Presentations. | <ul style="list-style-type: none"> - Defense. - Evaluation of the dissertation. |
| 2.3 | Defend research findings in biodiversity by critically evaluating data, justifying methodologies, and providing evidence-based conclusions to address conservation challenges. | S3 | <ul style="list-style-type: none"> - Coursework. - Seminars. - Regular feedback sessions. - Presentations. | <ul style="list-style-type: none"> - Coursework. - Defense. - Evaluation of the dissertation. |
| 2.4 | Investigate biodiversity challenges by applying research methodologies, analyzing data, and synthesizing information to develop evidence-based solutions. | S4 | <ul style="list-style-type: none"> - Coursework. - Seminars. - Regular feedback sessions. - Presentations. | <ul style="list-style-type: none"> - Coursework. - Defense. - Evaluation of the dissertation. |
| 2.5 | Communicate effectively the complex concepts, and research findings related to biodiversity and conservation to diverse audiences using written and oral presentations. | S5 | <ul style="list-style-type: none"> - Coursework. - Seminars. - Regular feedback sessions. - Presentations. | <ul style="list-style-type: none"> - Coursework. - Defense. - Evaluation of the Dissertation. |
| ... | | | | |
| 3.0 | Values, autonomy, and responsibility | | | |
| 3.1 | Perform the research study independently, without bias following the utmost ethical standards. | V1 | <ul style="list-style-type: none"> - Coursework. - Ethical research practices sessions. | <ul style="list-style-type: none"> - Coursework. - Defense. |
| 3.2 | Demonstrate high personal effectiveness and responsibility during work individually or in group research. | V2 | <ul style="list-style-type: none"> - Coursework. - Ethical research practices sessions. | <ul style="list-style-type: none"> - Coursework. - Defense. |

| Code | Course Learning Outcomes | Code of CLOs aligned with program | Teaching Strategies | Assessment Methods |
|------|--------------------------|-----------------------------------|---------------------|--------------------|
| ... | | | | |

C. Course Content:

| No | List of Topics | Contact Hours |
|--------------|---|---------------|
| 1. | Filed and/or lab work; Data collection. | 3 |
| 2. | Filed and/or lab work; Data collection. | 3 |
| 3 | Filed and/or lab work; Data collection. | 3 |
| 4 | Filed and/or lab work; Data collection and data analysis. | 3 |
| 5 | Filed and/or lab work; Data collection and data analysis. | 3 |
| 6 | Filed and/or lab work; Data collection and data analysis. | 3 |
| 7 | Filed and/or lab work; Data collection and data analysis. | 3 |
| 8 | Filed and/or lab work; Data collection and data analysis. | 3 |
| 9 | Filed and/or lab work; Data collection and data analysis. | 3 |
| 10 | Writing the research work; introductions to research work, reviewing the literature, and discussing the summed-up data. | 3 |
| 11 | Writing the research work; introductions to research work, reviewing the literature, and discussing the summed-up data. | 3 |
| 12 | Writing the research work; introductions to research work, reviewing the literature, and discussing the summed-up data. | 3 |
| 13 | Writing the research work and revising it to put it in its final form. | 3 |
| 14 | Writing the research work and revising it to put it in its final form. | 3 |
| 15 | Writing the research work and revising it to put it in its final form. | 3 |
| Total | | 90 |

NB: the contact hours presented here for the two semesters.

D. Students Assessment Activities:

| No | Assessment Activities * | Assessment timing (in week no) | Percentage of Total Assessment Score |
|----|--|--------------------------------|--------------------------------------|
| 1. | Coursework (Field and laboratory work reports, draft submissions, progress reports, reviewing the literature, etc...) (by supervisor). | From week 1 to week 15 | 60 |
| 2. | Defense (Oral presentation, poster presentation, and discussion) (by examination committee; 2 different Referees). | 17 | 10 |
| 3. | Evaluation of the Dissertation (by examination | 17 | |



| No | Assessment Activities * | Assessment timing (in week no) | Percentage of Total Assessment Score |
|-----|-----------------------------------|--------------------------------|--------------------------------------|
| | committee; 2 different Referees). | | 30 |
| ... | Total | | 100 |

*Assessment Activities (i.e., Written test, oral test, oral presentation, group project, essay, etc.)

E. Learning Resources and Facilities:

1. References and Learning Resources:

| | |
|---------------------------------|--|
| Essential References | <ul style="list-style-type: none"> - Roberts, C. and Hyatt, L. (2019). The Dissertation Journey: A Practical and Comprehensive Guide to Planning, Writing, and Defending Your Dissertation, 3rd edition, SAGE Publications Ltd. ISBN 9781506373317. - Bailey, S. (2011). Academic Writing a Handbook of International Students's 3rd edition. ISBN 0-203-83165-9; Master e-book ISBN |
| Supportive References | <ul style="list-style-type: none"> - Jaan, M. (2000). Textbook Research and Writing, Frankfurt am Main: Peter Lang. |
| Electronic Materials | <ul style="list-style-type: none"> - Saudi digital library. - <i>Journal of Biodiversity</i>. - UNESDOC Digital Library. |
| Other Learning Materials | <ul style="list-style-type: none"> - None. |

2. Educational and Research Facilities and Equipment Required:

| Items | Resources |
|---|--|
| <p>facilities (Classrooms, laboratories, exhibition rooms, simulation rooms, etc.)</p> | <ul style="list-style-type: none"> - A sufficient number of classrooms, well well-equipped practical laboratories are available to accommodate up to 25 students. - Library. |
| <p>Technology equipment (Projector, smart board, software)</p> | <ul style="list-style-type: none"> - Data show projectors and a wireless internet connection are available for students and faculties. - Data show projectors and wireless internet connections available for students and faculties. - Smart blackboard. Computer Portable PowerPoint presentations. |
| <p>Other equipment (Depending on the nature of the specialty)</p> | <ul style="list-style-type: none"> - None. |

F. Assessment of Course Quality:

| Assessment Areas/Issues | Assessor | Assessment Methods |
|-------------------------|----------|--------------------|
|-------------------------|----------|--------------------|

| Assessment Areas/Issues | Assessor | Assessment Methods |
|---|--|----------------------|
| Effectiveness of teaching | - Students. - Faculty members. | - Direct & indirect. |
| Effectiveness of students assessment | - Course instructors & Course coordinator (Teachers). | - Direct. |
| Quality of learning resources | - Students. | - Indirect. |
| The extent to which CLOs have been achieved | - Course instructors. - Course coordinator. - Quality Committee. | - Direct & indirect. |
| Other | | |

Assessor (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify))

Assessment Methods (Direct, Indirect)

G. Specification Approval Data:

| | |
|---------------------------|-------------------------------|
| COUNCIL /COMMITTEE | DEPARTMENT OF BIOLOGY COUNCIL |
| REFERENCE NO. | DEPARTMENT COUNCIL NO (26) |
| DATE | 26/11/1444 H |